EXHIBIT "A"

MITIGATION MONITORING AND REPORTING PROGRAM EEL RIVER ESTUARY AND CENTERVILLE SLOUGH ENHANCEMENT PROJECT

In order to mitigate or avoid significant effects resulting from the proposed project, Public Resources Code Section 21081.6 requires that monitoring and reporting procedures take place through a Mitigation Monitoring and Reporting Program (MMRP). **Table A-1** provides the MMRP for the proposed Project in accordance with those guidelines.

TABLE A-1MITIGATION MONITORING AND REPORTING PROGRAM

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
3.2 AR-1	Agricultural Resources Pasture Monitoring Plan (not a Mitigation Measure). The Coastal Conservancy shall put in place a Pasture Monitoring Plan to monitor the increase in productivity resulting from the proposed Project for no fewer than five years. The Pasture Monitoring Plan will assess the	Applicant	Humboldt County Planning and Building Department	Project operation	Project operation	County/ State standards	Applicant/ Coastal Conservancy
	the Northcoast Regional Land Trust. Mitigation Measure						
3.3	Air Quality						
AQ-1	 Dust Control Measures during Construction. The contractor shall implement the following Best Management Practices: 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, active graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 	Applicant's Contractor	Humboldt County Planning and Building Department	Project construction	During construction	County/ standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	 All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. All vehicle speeds on unpaved roads shall be limited to 15 mph, unless the unpaved road surface has been treated for dust suppression with water, rock, wood chip mulch, or other dust prevention measures. 						
3.4	Biological Resources						
BIO-1a	 Avoidance, Minimization, and Mitigation for Tidewater Goby. Because implementing the Project could directly or indirectly harm or kill Tidewater Gobies, the following avoidance and minimization measures will be incorporated into the Project: Construction activities will be phased and conducted in a sequence that minimizes impacts to Tidewater Gobies. Construction also will be limited to dryseason work windows (June 15 through October 15) to reduce the amount of goby habitat affected and minimize the impact on water quality. Although dryseason work windows may coincide with spawning and larval development, the footprint of available goby habitat may be smaller because summer conditions typically are drier, reducing the area in which Tidewater Gobies may be present. In addition, conducting work during the dry season will minimize the impact on water quality from sediment generated by construction activities and from spills that could occur during construction and maintenance of the Project (e.g., oil, fuel, hydraulic fluid). Phase Project construction so Tidewater Gobies can be relocated to sites in the Project area but away from areas targeted for restoration. During excavation, Tidewater Gobies may be crushed by equipment or debris or may be removed from 	Applicant	USFWS	First year of construction during the dry season and pre-operation	During construction and operation	State and Federal standards	Applicant

Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
channels or marshes unintentionally by equipment. Mortality can be minimized by capturing and relocating Tidewater Gobies out of construction areas. Relocating Tidewater Gobies from areas targeted for restoration to habitat outside of the immediate restoration area before construction begins is intended to protect individual fish; however, improper capture and handling may result in injury or mortality. In addition, Tidewater Gobies that need to be relocated should be taken to areas that have suitable habitat (e.g., where Tidewater Gobies are known to thrive). Therefore, the capture and handling of Tidewater Gobies will be conducted by qualified biologists, and suitable habitats for relocation will be identified before construction begins. Tidewater gobies were successfully translocated as part of restoration activities at the nearby Riverside Ranch (Kramer 2016). • Where dewatering needs to occur, all pump intakes will be screened, and only qualified biologists will conduct goby rescue during dewatering. Dewatering to facilitate excavation and other construction activities may be harmful if Tidewater Gobies become entrained into dewatering pumps or if Tidewater Gobies become stranded. • To compensate for the increased potential for predation by non-native species on Tidewater Gobies, the quantity and quality of post-construction habitat for Tidewater Gobies will be increased in the Project area. Tidewater Goby populations are expected to expand into restored areas and be able to withstand any potential increase in predation by non-native species such as Sacramento Pikeminnow as a result of this increase in complex vegetated aquatic habitat.						
Bio-1b Conduct pre-construction Avian Surveys for Nesting Passerine Birds and Avian Species of Special Concern.	Applicant	USFWS; CDFW	Pre- construction	Pre- construction	Federal and State standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	Trees are not present; therefore, none would be removed. Clearing of shrubs or other vegetation, if necessary for construction or maintenance, shall be conducted during the fall and/or winter months from August 16 to February 29, outside of the active nesting season for migratory bird species (i.e., March 1 to August 15). If vegetation removal or ground disturbance cannot be confined to work during the non-breeding season, the applicant shall have a qualified biologist conduct preconstruction surveys within the impact area for ground disturbance, vegetation removal and/or maintenance activities, to check for nesting activity of migratory, raptors, and special-status bird species. The biologist shall conduct the preconstruction surveys within the 14-day period prior to vegetation removal and ground-disturbing activities (on a minimum of three separate days within that 14-day period). If ground disturbance and vegetation removal work lapses for 15 days or longer during the breeding season, a qualified biologist shall conduct a supplemental avian preconstruction survey before Project work may be reinitiated. If active nests are detected within the construction or maintenance (operation) footprint or within 500 feet of construction activities, the applicant shall have locations flagged that are supporting breeding, and will not begin ground disturbing work or vegetation removal inside the buffers until the nests have fledged. Construction activities shall avoid nest sites until the biologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers will be implemented if deemed appropriate in coordination with CDFW. In general, the buffer for common species would be determined on a case-by-case basis with consultation with CDFW, the buffer for sensitive species would be 300 feet, and the buffer for raptors would be 500 feet.						
BIO-1c	Avoid, Minimize, and Mitigate for Potential Impacts to	Applicant	USFWS	During	During	Federal	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	Western Snowy Plover. Construction and maintenance activities associated with dune re-establishment would be conducted between September 1 and March 1, outside of the plover nesting season. The area of impact, defined as permanent or semi-permanent change in elevation or conversion to > 30 percent vegetation cover, would be mitigated through enhancement of dunes elsewhere on the EREP site, in the northern half of the dune complex within the site (generally between the northern limit of the Inner marsh and the outlet of the Eel River). Enhancement would occur at a minimum ratio of 1.1:1, and would include removal of European beach grass through mechanical or other appropriate methods; and quarterly maintenance, through removal of re-sprouts, for a period of two years post-construction. The initial removal effort would occur concurrently with the impacts. This would result in no net loss nor temporal loss of suitable Western Snowy Plover breeding habitat.			construction	construction, quarterly and for two years post- construction	standards	
BIO-1d	Habitat Enhancement for Northern Red-legged Frog. Although direct impacts to Northern Red-legged Frog breeding habitat is not anticipated because the duckponds will remain in freshwater conditions, measures for this species are included because individual frogs may disperse for considerable distances and could enter construction areas. Pre-construction surveys would occur prior to ground disturbance in any areas of potential frog habitat (not in saline or tidal areas). After consultation with CDFW, a qualified Project biologist will relocate Northern Red-legged Frog eggs if observed within the direct Project footprint in spring prior to construction or if observed during Project implementation.	Applicant	CDFW	Pre- construction	During construction	State standards	Applicant
BIO-1e	Mitigate for potential impacts to salmonid species and Longfin Smelt. The in-water construction and maintenance work window will be limited to June 15th through October 15th to avoid or minimize impacts to juvenile salmonids and Longfin	Applicant	CDFW/ NOAA Fisheries	Pre- construction and pre- operation	During construction	Federal and State standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	Smelt. Before potential de-watering activities begin in creeks or channels within the Project area, the qualified Biologist shall ensure that native aquatic vertebrates and larger invertebrates, if feasible, are relocated out of the construction footprint into a flowing channel segment by a qualified fisheries biologist. In deeper or larger areas, water levels shall first be lowered to manageable levels using methods to ensure no impacts to fisheries and other special status aquatic species. A qualified fisheries biologist or aquatic ecologist shall then perform appropriate seining or other trapping procedures to a point at which the biologist is assured that almost all individuals within the construction area have been caught. These individuals shall be kept in buckets with aerators to ensure survival. They shall then be relocated to an appropriate flowing channel segment or other appropriate habitat as identified by the qualified Biologist in consultation with NOAA Fisheries and CDFW. Federally threatened salmonid species that occur within the Project area either natal or non-natal Coho salmon, steelhead, and Chinook salmon.						
BIO-2a	Mitigate Impacts to Beach Layia. The following measures shall be implemented to mitigate impacts to the federally listed beach layia during construction and operation/ongoing maintenance of the Project, primarily associated with dune building on EREP and European beachgrass removal associated with Western Snowy Plover habitat enhancement required by Mitigation Measure BIO-1c. A pre-construction survey shall be conducted prior to the beginning of ground disturbing work and at the appropriate season to verify the extent of known beach layia occurrences and to identify new occurrences on or adjacent to dunes, if any. At the beginning of construction, flagging or exclusion fencing shall be installed around all known occurrences of beach layia within 10 feet of construction limits. Locations of fencing shall be identified and flagged by a qualified biologist and installed while the	Applicant	USFWS	Pre- construction and pre- operation	Annual monitoring post-construction for two years	No net loss in number of individual plants. If replanting is employed, a 2:1 planting ratio includes built in overplanting in order to meet success criteria and no net loss.	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	biologist is present. The fencing shall be inspected weekly for the duration of construction to ensure that the fencing remains installed properly. Direct impacts to beach layia shall be avoided.						
	If any new or existing occurrences of beach layia are in proximity to areas of Project-related ground disturbance and if Project activities could conceivably result in indirect impacts such as alteration of dune erosion or deposition patterns, then mitigation will be employed that includes one or more of the following mechanisms: protective wooden fencing to shelter the population from shifting sand, seed collection from the site and/or nearby known occurrences so that replacement plants can be grown out at a nursery and replaced at a stable portion of the site (2:1 planting ratio), seed collection for seed banking in the event indirect impacts occur as a result of the Project in a dynamic coastal environment, plant relocation, and/or preparation of a sensitive species management plan (SSMP) that provides further details about the above options in cooperation with USFWS as to which mechanism(s) are preferred option(s) at the time of impact. The triggering mechanism for seed banking would be if this plant species is identified within 100 feet in a downwind direction of dune establishment, and/or 50 feet in any other direction, or within the footprint of the proposed Western Snowy Plover mitigation area. If an SSMP is deemed appropriate by jurisdictional agencies, the report would lay out specific timing and details of seed collection, mitigation site identification (within EREP), substrate preparation, monitoring and maintenance. If plant replacement, or relocation is deemed necessary (whether through relocation and/or replanting) annual monitoring for two years shall be required, with no net loss of number of individual number of plants. If replanting is employed, a 2:1 planting ratio includes built in overplanting in order to meet success criteria and no net loss.						
BIO-2b	Mitigate Impacts to Sensitive-Listed Plant Species.	Applicant	CDFW/ NMFS	Pre-	Pre-	Success	Applicant

Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
Mitigation for special status plant species other than beach layia is addressed collectively for all species, with modifications noted for individual species; this measure is patterned after and slightly modified from one used successfully on the adjacent Salt River (Grassetti et al. 2011). Significant impacts to special-status plant species present or likely to be present onsite shall be minimized, avoided, and (if necessary) compensated by complying with the following:			construction and pre- operation	construction through construction; and monitored for five years post- construction	criteria achieved	
 Pre-construction and maintenance surveys: Potential habitat for special-status plant species shall be surveyed in appropriate seasons for optimal species-specific detection prior to Project excavation/dredging, fill, drainage, or flooding activities associated with Project construction and maintenance. Survey methods shall comply with CNPS/CDFG rare plant survey protocols, and shall be performed by qualified field botanists. Surveys shall be modified to include detection of juvenile (pre-flowering) colonies of perennial species when necessary. Any populations of special-status plant species that are detected shall be mapped. Populations shall be flagged if avoidance is feasible and population is located adjacent to construction areas. Previous special-status plant surveys documented populations of Lyngbye's sedge and Humboldt Bay owl's clover as described above. 						
 The locations of any special status plant populations to be avoided shall be clearly identified in the contract documents (plans and specifications). If special-status plant populations are detected where 						
construction or maintenance would have unavoidable impacts, a compensatory mitigation plan shall be prepared and implemented in coordination with CDFW. Such plans may include salvage, propagation, on-site reintroduction in restored habitats, and monitoring. Plans have been developed for Lyngbye's sedge, Humboldt Bay owl's						

Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
clover, and eelgrass, and will be further revised in consultation with regulatory agencies. Impacts to these species shall be avoided or minimized to the extent feasible. It should be noted that populations of owl's clover can fluctuate dramatically between years (Pickart 2001), making the number of individuals impacted difficult to predict in advance.						
• Humboldt Bay owl's clover: A qualified botanist shall collect and conserve seed from local (preferable on-site, or from the immediate region if on-site sources are insufficient) populations of Humboldt Bay owl's clover. These seeds shall be used to replant a population of this species to mitigate for the population lost to construction impacts. The Project area shall be monitored for five years and compared with a reference population to determine whether replanting and natural recruitment have resulted in population numbers equal to or greater than those present before Project implementation. If the population does not appear to have reestablished during the five-year period, seed shall be collected from elsewhere and additional attempts shall be made to reestablish the population.						
 Lyngbye's sedge: Seed shall be collected from Lyngbye's sedge in the Project area to be used for replanting in the event that natural recruitment does not result in a post-Project population size equal to or greater than the pre-Project population size. Monitoring and adaptive management will be conducted for a ten year period to determine whether the area and approximate number of Lyngbye's sedge in the Project area is similar to the area of sedge before the Project. Additional planting efforts (from seed or from rootstock of mature plants) shall be undertaken if the population size is declining below pre-Project size during the monitoring period. Eelgrass: The extent and density of eelgrass cover within areas of Project impact shall be mapped prior to 						

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	construction. Natural recruitment shall be monitored for three years to determine whether eelgrass is naturally recruiting in newly created channels adequately to replace the area of eelgrass lost due to Project impacts. If eelgrass does not establish in an area equal to or greater than that lost due to Project impacts in the first three years, eelgrass shall be actively planted to offset any lack of natural recruitment, using the most current scientific methods and following NMFS guidance. If CDFW requires propagation or transplantation, scientifically sound genetic management guidelines and protocols for rare plants shall be applied.						
BIO-3a	Mitigate Impacts to Sensitive Listed Habitats Through Avoidance and Re-establishment. The restored tidal wetlands will be monitored to determine whether it is developing the diversity representative of native tidal marshes. If necessary, planting and/or seeding or other remedial measures may occur to augment natural recruitment and/or to increase the diversity of salt marsh species using an adaptive management approach. The small patches of intact Dune Mat vegetation will be protected in a similar manner as proposed to protect sensitive plant species above so that impacts during construction can be avoided. If any new or existing occurrences of Dune Mat vegetation communities are in proximity to areas of Project-related ground disturbance, and if Project activities could conceivably result in indirect impacts such as alteration of dune erosion or deposition patterns, then mitigation will be employed that includes one or more of the following mechanisms: protective wooden fencing to shelter the sensitive vegetation community from shifting sand, seed collection from the site and/or nearby known occurrences so that replacement plants can be grown out at a nursery and replaced at a stable portion of the site (2:1 planting ratio), seed collection for seed banking in the event indirect impacts occur as a result of	Applicant	CDFW/ CCC	Post- construction	Annually for 10 years and post- construction	No performance criteria for restored tidal wetlands or dune mat	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	the Project in a dynamic coastal environment.				_		
BIO-3b	Mitigate Impacts to Sensitive Listed Habitats Through Control of Invasive Species. In order to reduce the likelihood of dense-flowered cordgrass (Spartina) colonizing restored tidal marsh, existing populations in and adjacent to (north of the tidegates) the Project footprint shall be controlled prior to construction using manual, mechanical, and/or approved chemical methods, and in compliance with appropriate methods analyzed and disclosed in the Regional Invasive Spartina Management Plan and the associated EIR. During the operation period of the Project (10 year maintenance under the adaptive management plan), removal of cordgrass would be conducted under the authority of the Regional Invasive Spartina Management Plan and the associated EIR. Colonization of the Inner Marsh and other portions of the Project footprint by cordgrass will be controlled in collaboration with the region-wide eradication program. Invasive weed removal shall be conducted as part of Project maintenance. Weed removal techniques may include manual, mechanical, and/or approved chemical means (including mowing, cutting, pulling, grinding, and/or excavation and burial) as discussed in the adaptive management plan and as approved by jurisdictional agencies. Heavy equipment would be required to be cleaned and weed-free before entering the site.	Applicant	CDFW/ CCC	Pre-construction and pre-operation	Pre- construction through construction; and 10 years operation post- construction	Success criteria achieved	Applicant
BIO-4	Mitigate Temporary and Short-term Impacts to Sensitive Habitats Including Wetlands Through Construction Minimization and Avoidance Measures. • The locations of sensitive habitats including wetlands to be avoided shall be clearly identified in the contract documents (plans and specifications).	Applicant	USACE/ CCC	Pre- construction	Pre- construction through construction and post- construction for five years	Agency standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	 Before clearing and grubbing commences, disturbance areas shall be flagged to clearly define the limits of the work area. These areas shall be clearly identified on the contract documents (plans and specifications). 						
	 Selected contractors shall sign a document stating that they have read, understand, and agree to the required resource avoidance measures, and shall have construction/maintenance crews participate in a training session on sensitive resources. 						
	 A qualified biologist shall be on-site to observe activities as appropriate when construction or maintenance in or adjacent to sensitive habitat including wetlands occurs. Site disturbance shall be minimized to the greatest extent feasible by using existing disturbed areas for access roads and staging areas, and concentrating the area of disturbance associated with restoration actions within the minimum space(s) necessary to complete the Project. Where feasible, temporary measures for access or construction, such as the use of temporary tracks or pads, shall be used to minimize impacts. Revegetation activities shall take place at seasonally appropriate times based on habitat types, and as soon as feasible following habitat disturbance, to restore disturbed areas to pre-Project conditions or better. 						
	 There would be no net loss of jurisdictional wetlands. Any permanent fill in wetlands would be compensated through in-kind re-establishment or enhancement of wetlands at a ratio determined by use of the USACE SPD Mitigation Ratio Checklist and the California Coastal Commission. 						
3.5	Cultural Resources						
CR-1	Disturbance of Undiscovered Cultural Resources. During the course of ground-disturbing activities associated with Project implementation, if any cultural resources are discovered, work shall be halted immediately within 66 feet	Applicant A-13	Humboldt County Planning and Building	During construction	Throughout construction	County standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	of the discovery, and the Humboldt County Planning Department shall be immediately notified. At that time, the county will coordinate any necessary investigation and evaluation of the discovery with a qualified archaeologist. If the archaeological resources are Native American, representatives of the appropriate culturally affiliated tribe shall also be enlisted to help evaluate the find and suggest appropriate treatment. The county shall consult with the archaeologist and agree upon implementation of treatment of the resources that is deemed appropriate and feasible. Such treatment may include avoidance, curation, documentation, excavation, preservation in place, or other appropriate measures. The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the Commission must be approved by the CSLC.		Department				
CR-2	Potential Disturbance of Undiscovered Paleontological Resources. During the course of ground-disturbing activities associated with Project implementation, if any paleontological resources are discovered, work shall be halted immediately within 66 feet of the discovery, and the Humboldt County Planning Department shall be immediately notified. At that time, the county will coordinate any necessary investigation of the discovery with a qualified paleontologist. The county shall consider the mitigation recommendations of the qualified paleontologist for any unanticipated discoveries of paleontologist resources. The county shall consult with the paleontologist and agree upon implementation of a measure(s) that are deemed appropriate and feasible. Such mitigation measures may include avoidance, curation, documentation, excavation, preservation in place, or other appropriate measures.	Applicant	Humboldt County Planning and Building Department	During construction	Throughout construction	County standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
CR-3	Potential to Uncover Human Remains. If construction activities result in the discovery of human remains during ground disturbing activities, in accordance with California Health and Safety Code Section 7050.5, no further disturbance shall occur until the Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The Coroner shall be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner shall notify the NAHC, which shall determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials.	Applicant	Humboldt County Coroner	During construction	Continuously during construction	State standards	Applicant
3.6	Geology and Soils						
GEO-1	Implement Recommendations in the Geotechnical Report. The California State Coastal Conservancy shall ensure that the Project is designed to comply with the recommendations in the Project's Geotechnical Report (LACO 2016) to ensure seismic stability and adherence to the CBC. The geotechnical recommendations are proposed to be incorporated in the final plans and specifications and implemented during construction. Professional inspection by a qualified engineer or geologist of foundation and excavation, earthwork and other geotechnical aspects of site development shall be performed during construction in accordance with the current version of the CBC.	Applicant	Humboldt County Planning and Building Department	Pre- construction	During construction	County/ State standards	Applicant
3.9	Hydrology and Water Quality						
HWQ-1a	Manage Construction Storm Water. The Project and operations shall obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with	Applicant	Humboldt County Planning and Building Department/	Pre- construction	Pre- construction through construction	County/ NCRWQCB standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. In compliance with the NPDES requirements, a Notice of Intent (NOI) shall be prepared and submitted to the NCRWQCB, providing notification and intent to comply with the State of California General Permit. In addition, a Construction Storm Water Pollution Prevention Plan (SWPPP) would be prepared for pollution prevention and control prior to initiating site construction activities. The Construction SWPPP shall identify and specify the use of erosion sediment control BMPs for control of pollutants in stormwater runoff during construction related activities, and would be designed to address water erosion control, sediment control, off-site tracking control, wind erosion control, non-stormwater management control, and waste management and materials pollution control. A sampling and monitoring program shall be included in the Construction SWPPP that meets the requirements of the NCRWQCB to ensure the BMPs are effective. A Qualified Storm Water Pollution Prevention Plan Practitioner shall oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensuring overall compliance. The operations associated with the adaptive management plan include but not limited to activities associated with sediment management and channel maintenance are not anticipated to require preparation and implementation of a SWPPP as per section I (C) of Order No. 2009-0009 DWQ which lists activities that are not covered under the general permit: (24) Routine maintenance to maintain the original line and grade, hydraulic capacity, or original purpose of		NCRWQCB				
	the facility and (25) Disturbance to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and levelling and soil preparation.						
HWQ-1b	Implement Contractor Training for Protection of Water Quality. All contractors that would be performing demolition,	Applicant	Humboldt County Planning and	Pre- construction	Pre- construction through	County standards	Applicant

	Monitoring Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and/or Duration of Monitoring	Performance Criteria	Proposed Funding
	construction, grading, operations or other work that could cause increased water pollution conditions at the site (e.g., dispersal of soils) shall receive training regarding the environmental sensitivity of the site and need to minimize impacts. Contractors also shall be trained in implementation of stormwater BMPs for protection of water quality.		Building Department		construction		
HWQ-1c	In-Stream Erosion and Water Quality Control Measures during Channel Excavation and Operations. In instances where excavation occurs in an effort to widen/deepen Project channels and ditches, in-stream erosion and turbidity control measures shall be implemented. These measures include installation and maintenance of in-stream turbidity curtains, cofferdams and silt-fence along channel banks as specified in Project designs, specifications and erosion control plans.	Applicant	Humboldt County Planning and Building Department	During construction	Throughout construction	County standards	Applicant
HWQ-3	Implement Erosion and Water Quality Monitoring, Maintenance and Adaptive Management Plan. The long-term erosion monitoring of on-site channels would routinely screen the Project for areas experiencing excessive erosion leading to degraded water quality. Maintenance and adaptive management strategies are contained in the plan to stabilize areas experiencing excessive erosion.	Applicant	Humboldt County Planning and Building Department	Post- construction	Pre- construction per AMP	County standards	Applicant